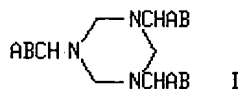


ACCESSION NUMBER: 1986:553325 CAPLUS  
 DOCUMENT NUMBER: 105:153325  
 ENTRY DATE: Entered STN: 01 Nov 1986  
 TITLE: Glyphosate derivatives  
 PATENT ASSIGNEE(S): Monsanto Co. , USA  
 SOURCE: Belg., 45 pp.  
 CODEN: BEXXAL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 INT. PATENT CLASSIF.:  
     MAIN: C07D  
     SECONDARY: C07F; A01N  
 CLASSIFICATION: 29-7 (Organometallic and Organometalloidal Compounds)  
                   Section cross-reference(s): 5  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

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PRIORITY APPLN. INFO.:			US 1984-659795	19841011
GRAPHIC IMAGE:				



## ABSTRACT:

Herbicidal phosphonomethylglycine (glyphosate) derivs. are prepd. by reacting Me<sub>3</sub>CN:CH<sub>2</sub> with ABCHNH<sub>2</sub>.HX (A,B = CN, ZCO<sub>2</sub>R, CO<sub>2</sub>R; Z = C1-6 alkylene; R is an esterifying radical; X is an anion) to give the hexahydrotriazine I, which is reacted with a H<sub>3</sub>PO<sub>3</sub> deriv. R<sub>1</sub>P(OY)<sub>2</sub> (R<sub>1</sub> = OY, OH; Y is an esterifying radical). Thus, a mixt. of ClCH<sub>2</sub>CH<sub>2</sub>OCOCH<sub>2</sub>NH<sub>2</sub>.HBr, Me<sub>3</sub>CN:CH<sub>2</sub> and MePh was stirred for 2 h give an intermediate, which upon reaction with P(OSiMe<sub>3</sub>)<sub>3</sub> gave ClC<sub>1</sub>Cl<sub>2</sub>Cl<sub>2</sub>OCOCH<sub>2</sub>NHCH<sub>2</sub>PO<sub>3</sub>H<sub>2</sub> (II). In greenhouse expts., post-emergence 4.48 kg II/ha totally controlled Cirsium, Limnorcharia, Panicum and other weeds.

SUPPL. TERM: glyphosate deriv herbicide prepn; post emergence herbicide  
 glyphosate; phosphonomethylglycine post emergence herbicide  
 INDEX TERM: Herbicides  
                   (postemergence, glyphosate derivs., prepn. of)  
 INDEX TERM: 623-33-6 13433-00-6 15960-31-3 20777-85-9 32213-95-9  
                   55878-21-2 104403-66-9 104403-67-0 104403-68-1  
                   104403-69-2 104403-70-5 104403-73-8 104403-74-9  
                   104403-76-1 104403-80-7 104403-81-8 104403-82-9  
                   104403-83-0 104403-84-1 104425-75-4  
 ROLE: RCT (Reactant); RACT (Reactant or reagent)  
                   (cyclization of, with butylazomethine)  
 INDEX TERM: 13987-61-6  
 ROLE: RCT (Reactant); RACT (Reactant or reagent)  
                   (cyclization of, with glycinate)  
 INDEX TERM: 60672-94-8P 104403-77-2P 104403-79-4P 104403-86-3P  
                   104403-87-4P 104403-88-5P  
 ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP  
                   (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with di-Ph phosphite)  
INDEX TERM: 85310-88-9P  
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction of, with tri-Ph phosphite)  
INDEX TERM: 63856-14-4P 85347-27-9P 91169-11-8P 98565-07-2P  
98565-08-3P 98565-09-4P 98565-10-7P 104403-71-6P  
104403-72-7P 104403-75-0P  
ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction of, with tris(trimethylsilyl) phosphite)  
INDEX TERM: 39600-46-9P 39600-51-6P 63913-70-2P 69162-30-7P  
69162-32-9P 69162-34-1P 74580-17-9P 98565-11-8P  
98565-13-0P 104403-56-7P 104403-57-8P 104403-58-9P  
104403-59-0P 104403-60-3P 104403-61-4P 104403-62-5P  
104403-63-6P 104403-64-7P 104403-65-8P 104403-78-3P  
104403-85-2P 104425-73-2P 104425-74-3P  
ROLE: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as herbicide)  
INDEX TERM: 101-02-0 4712-55-4  
ROLE: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with hexahydrotriazine derivs.)  
INDEX TERM: 1795-31-9  
ROLE: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with hexahydrotriazines)  
INDEX TERM: 98565-12-9  
ROLE: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with phosphites)